STATE OF MARYLAND

DHMH

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Public Health & Emergency Preparedness Bulletin: # 2009:16 Reporting for the week ending 04/25/09 (MMWR Week #16)

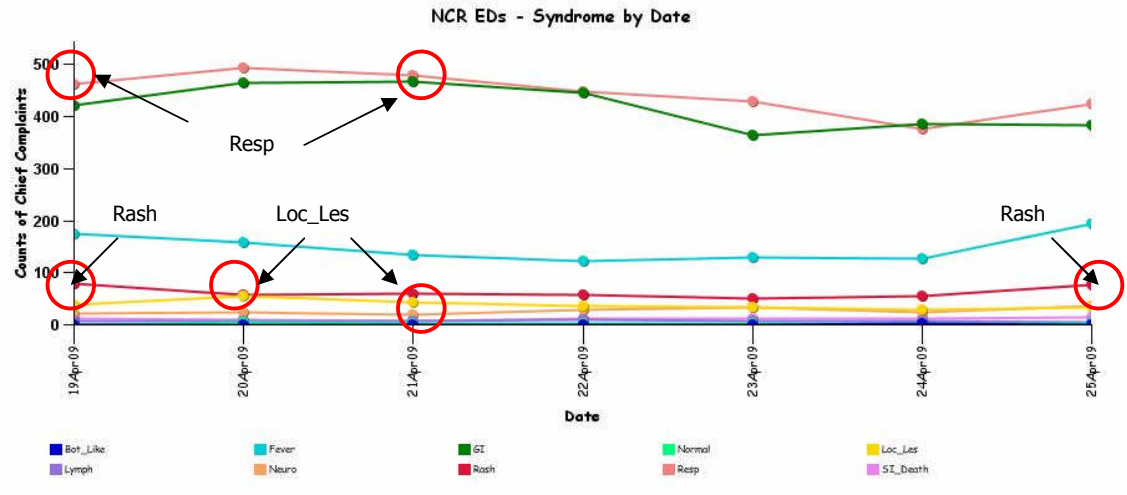
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

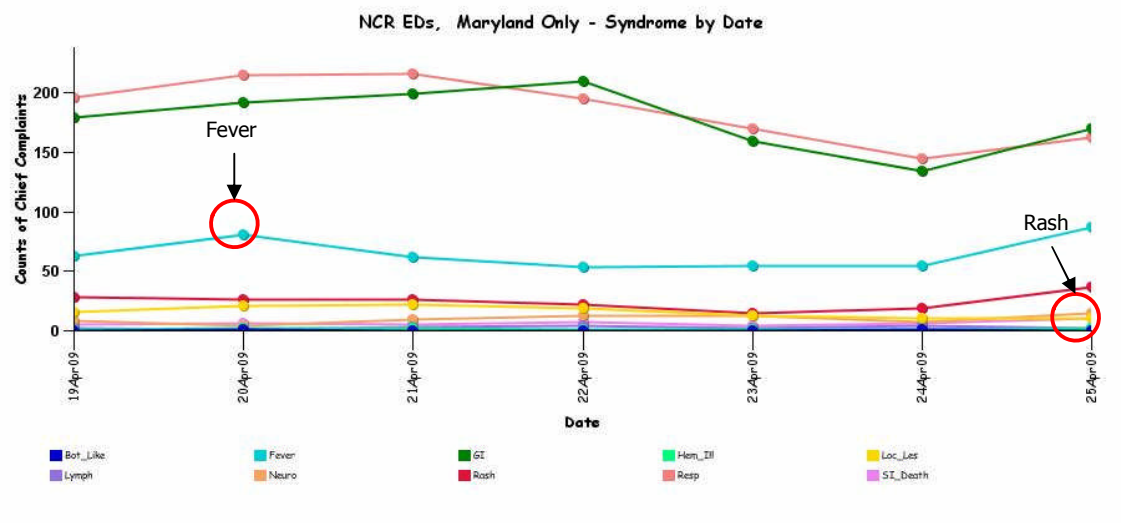
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

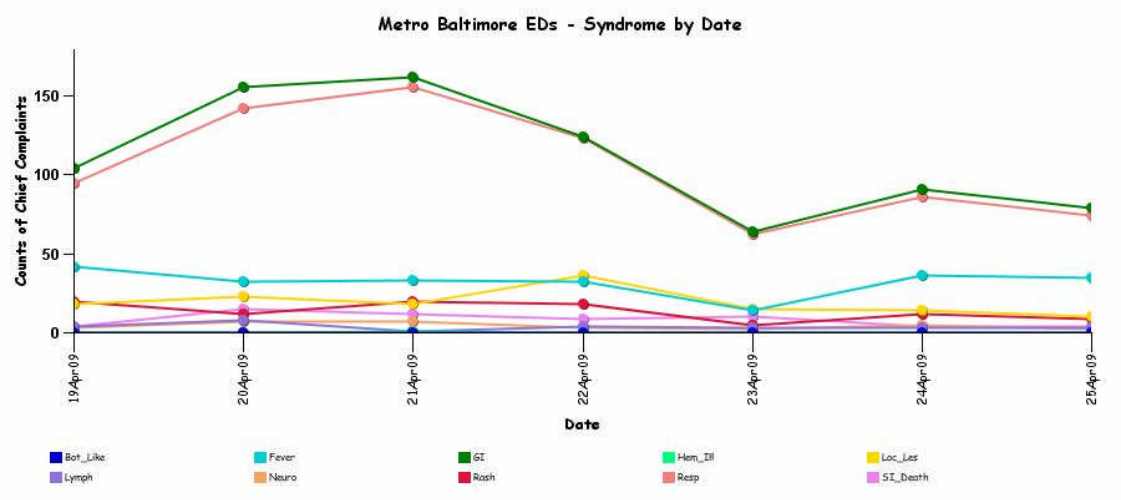
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



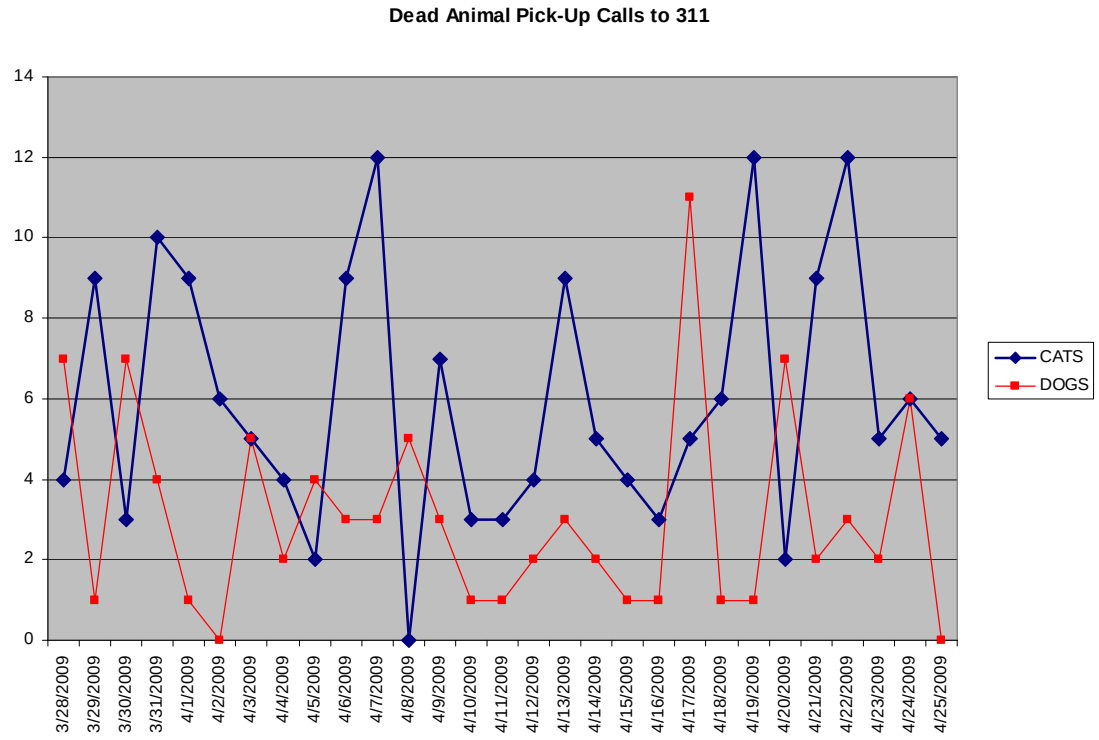
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

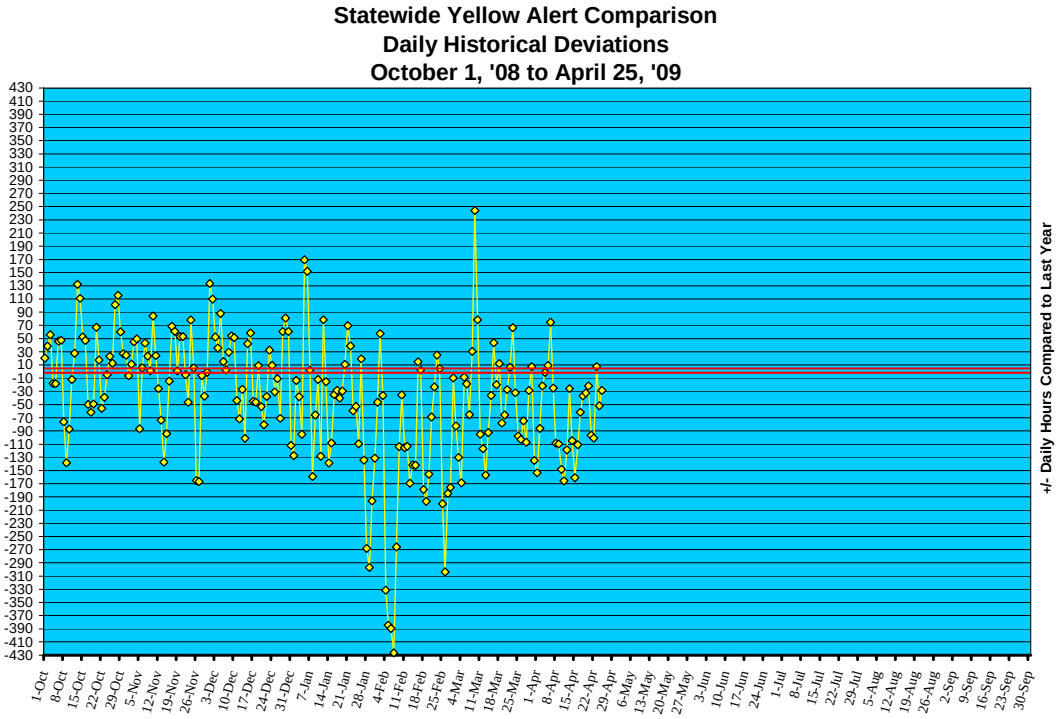
**** Red Alerts are not indicated on this graph.**

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in March 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Apr 19 – Apr 25, 2009):	14	0
Prior week (Apr 12 – Apr 18, 2009):	09	0
Week#16, 2008 (Apr 13 - 19, 2008):	11	0

4 outbreaks were reported to DHMH during MMWR Week 16 (April 19- 25, 2009):

2 Gastroenteritis outbreaks
2 outbreaks of GASTROENTERITIS associated with Nursing Homes

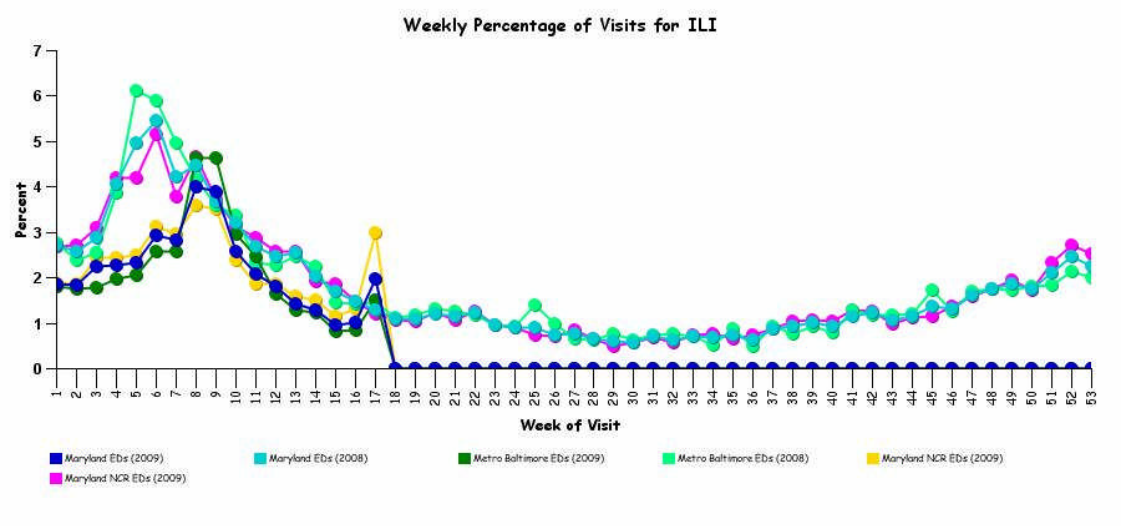
1 Foodborne Gastroenteritis outbreak
1 outbreak of FOODBORNE GASTROENTERITIS associated with a Restaurant

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS: Influenza activity in Maryland for Week 16 is SPORADIC. During Week 16, 28 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4*: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans (*Week 16 Reporting Period)

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

**More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of April 23, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 421, of which 257 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA, HUMAN (Egypt): 24 Apr 2009, The Ministry of Health has announced that a 34 year old woman from Tanta [city, Al Gharbiyah governorate] in the Nile Delta is no. 68 in the H5N1 human infection toll in Egypt. The woman began to show symptoms on 21 Apr 2009 and she was admitted to hospital on the same day. She had contact with infected domestic poultry. She is receiving Tamiflu (oseltamivir) treatment. The ministry says that her condition is stable.

AVIAN INFLUENZA, HUMAN (Egypt): 23 Apr 2009, The Ministry of Health of Egypt has reported a new confirmed human case of avian influenza. The case is a 4 year old boy from Akhmim District, Sohag governorate. His symptoms began on 18 Apr 2009, and he was hospitalized at Sohag Fever Hospital on 18 Apr 2009, where he was started on oseltamivir. He is in a stable condition. Infection with H5N1 avian influenza was confirmed by the Egyptian Central Public Health Laboratory on Tue 21 Apr 2009 and subsequently confirmed by the US Naval Medical Research Unit No. 3 (NAMRU-3). Investigations into the source of his infection indicate a history of close contact with dead and sick poultry prior to becoming ill. Of the 67 cases confirmed to date in Egypt, 23 have been fatal.

AVIAN INFLUENZA, HUMAN (Egypt): 23 Apr 2009. A 25 year old Egyptian woman has died of the H5N1 bird flu virus, the 25th human fatality of the disease in Egypt, state news agency MENA said on Wednesday [22 Apr 2009]. The woman, from Cairo, died of respiratory failure, MENA reported. Egypt (Cairo). On Tuesday [21 Apr 2009] MENA reported a 6 year old boy had died from the disease. He resided in Qalyubia [governorate] and was Egypt's 1st bird flu fatality of 2009, MENA quoted a health ministry spokesman as saying. The boy had been admitted to hospital in late March [2009]. Egypt, 67th case. A 4 year old boy from Sohag [governorate] has contracted bird flu and was in hospital. The boy was being treated with the antiviral drug Tamiflu. His infection brought to 67 the number of bird flu cases in humans in the most populous Arab country, which has been hit harder by bird flu than any other country outside Asia.): Egypt, 67th case. Egypt has seen a surge in human cases in recent months, with 16 confirmed since the start of the year [2009], compared to 7 cases between 1 Jan and 17 Apr last year [2008]. Most infected Egyptians had come into contact with infected domestic birds in a country where roughly 5 million households depend on domestically raised poultry as a significant source of food and income. The World Health Organisation said this month [April 2009] it was concerned some Egyptians may carry the bird flu virus without showing symptoms and this could give the virus more of a chance to mutate to a strain that spreads easily among humans.

AVIAN INFLUENZA, HUMAN, 67TH CASE (EGYPT): 22 Apr 2009. A 6 year old boy has died in Egypt after contracting avian influenza, becoming the country's 24th human casualty of the disease since 2006, the state-run Middle East News Agency reported today [21 Apr 2009]. The boy is the 1st fatality attributed to the virus in Egypt this year [2009], the news agency quoted Abdel-Rahman Shahine, a spokesman for the Health Ministry, as saying. The boy had shown symptoms of the virus on 22 Mar 2009 after coming in contact with dead birds, Shahine said. Egypt has the highest number of avian flu cases outside Asia, according to the most recent data from the World Health Organization. With the newest reports, the number of infected people there has reached 67. The Health Ministry reported the 67th infection earlier today [21 Apr 2009], saying a 4 year old child has contracted the virus. He was in the hospital in what was described as stable condition. He has received Tamiflu (oseltamivir) treatment according to Shah. Egypt has asked WHO to help investigate an outbreak of the so-called bird flu after a dozen non-fatal cases of the disease this year [2009] prompted speculation the virus may be becoming less virulent and more transmissible.

AVIAN INFLUENZA, HUMAN, 66TH CASE (EGYPT): 20 Apr 2009. An 18 month old Egyptian girl has contracted the highly pathogenic bird flu virus after coming into contact with infected birds, the latest case in a growing spate of infections in Egypt, state media said on Sunday [19 Apr 2009]. The new infection brings to 66 the number of bird flu cases in humans in the most populous Arab country, which has been hit harder by bird flu than any other country outside Asia. Egypt has seen a surge in human cases in recent months, with 15 confirmed since the start of the year [2009],

compared with 7 cases between 1 Jan and 17 Apr 2008. The girl, from the north Egyptian province of Kafr el-Sheikh, was being treated with the antiviral drug Tamiflu (oseltamivir), state news agency MENA reported, citing the health ministry. While the H5N1 avian influenza virus rarely infects people, experts say they fear it could mutate into a form that people could easily pass to one another, sparking a pandemic that could kill millions. Since 2003, H5N1 has infected at least 412 people in 15 countries and killed 254. It has killed or forced the culling of more than 300 million birds in 61 countries in Asia, the Middle East, Africa, and Europe. Some 23 Egyptians have died after contracting the bird flu virus. Most of those infected had come into contact with infected domestic birds in a country where roughly 5 million households depend on domestically raised poultry as a significant source of food and income. WHO said this month [April 2009] it was concerned that some Egyptians may carry the bird flu virus without showing symptoms and this could give the virus more of a chance to mutate to a strain that spreads easily among humans.

AVIAN INFLUENZA (CHINA): 19 Apr 2009. China's Ministry of Agriculture (MOA) confirmed Sunday [19 Apr 2009] a new outbreak of bird flu in Lhasa, southwestern Tibet Autonomous Region. The national bird flu laboratory confirmed that the H5N1 bird flu virus was found in poultry sold at a poultry wholesale market in Chengguan District of Lhasa on 12 Apr 2009. Emergency measures have been taken and the epidemic has been brought under control, the MOA said in a brief notice, and 1679 fowl were culled after the outbreak. According to the local health department, no abnormalities were found among people in contact with the poultry, the ministry said.

H1N1 (Swine Flu):

INFLUENZA A (H1N1) VIRUS, SWINE, HUMAN (NORTH AMERICA): 25 Apr 2009. Samples from a deadly respiratory illness outbreak in Mexico match swine influenza isolates from patients in the United States who had milder illnesses, an official from the US Centers for Disease Control and Prevention (CDC) said today [24 Apr 2009], fueling speculation that the World Health Organization (WHO) could be on the verge of raising the global pandemic alert level. The swine flu A/H1N1 strain has been confirmed in one more US citizen, a child from San Diego who has recovered, raising the total number of US cases to 8, Besser said. The virus contains gene segments from 4 different influenza types: North American swine, North American avian, human, and Eurasian swine. WHO said today that Mexican officials have reported 3 separate events. In the Federal District, the number of cases rose steadily through April, and as of yesterday, more than 854 cases of pneumonia, 59 of them fatal, had been reported in Mexico City. The illness outbreak in Mexico City prompted the country's health minister, Jose Cordova, to cancel classes in Mexico City today and advise students and adults to avoid crowded public places and large events, Bloomberg News reported. Mexican officials also reported 24 cases with 3 deaths from an influenza-like illness in San Luis Potosi, in the central part of the country, and 4 cases with no deaths in Mexicali, near the US border, WHO reported. The virus in Mexico has primarily struck otherwise healthy young adults, WHO said, which is a departure from seasonal influenza, which typically affects the very young and very old. CDC's laboratory analyzed 14 samples from severely ill Mexican patients and found that 7 of them had the same swine flu mix as the virus that infected the US patients. WHO said today that Canada's national laboratory has confirmed swine flu A/H1N1 in 18 isolates from Mexican patients, 12 of which were genetically identical to the swine flu viruses from California. WHO and CDC both said they were sending representatives to Mexico to assist local authorities, and WHO said it has alerted its Global Alert and Response Network. CDC officials have said the swine flu A/H1N1 virus is susceptible to the newer antivirals oseltamivir (Tamiflu) and zanamivir (Relenza), but not the older ones, amantadine and rimantadine.

INFLUENZA A(H1N1) VIRUS, SWINE, HUMAN – (USA: CALIFORNIA, TEXAS): 24 Apr 2009. Five more cases of an unusual swine influenza virus infection have surfaced, officials from the US Centers for Disease Control and Prevention (CDC) announced today [23 Apr 2009], bringing the total to 7 and raising more concerns about human-to-human transmission. The new cases include 2 clusters, 2 16-year-old boys in San Antonio, Texas, who attended the same school, and a father and daughter from San Diego County [California]. Anne Schuchat, MD, interim deputy director for the CDC's science and public health program, told reporters today [23 Apr 2009] at a teleconference that the clusters are consistent with human-to-human spread. She also said that the World Health Organization has not raised its 6-phase pandemic alert level above phase 3 (no or very limited human-to-human transmission). The 5th new case occurred in a patient from Imperial County [California], which borders San Diego County. Both counties are home to the 1st 2 swine flu patients that the CDC announced on 21 Apr 2009. News of the 5 new swine flu cases came on the same day Canadian officials warned its public health, medical, and quarantine workers to look for illnesses among Canadians returning from Mexico. Mexico has reported several cases of severe respiratory illness and has asked Canada to assist in finding the source of the illnesses, some of which have been fatal, according to a report today [23 Apr 2009] from the Canadian Press (CP). Schuchat said no swine flu cases have been confirmed in Mexico or Canada, but that CDC officials are discussing the situation with Mexican health officials and representatives from the Pan American Health Organization (PAHO). The CDC said genetic sequencing of samples from the 1st 2 patients, California children who lived in adjacent counties, show that the swine flu virus contains segments from 4 different viruses: some North American swine, some North American avian, one human influenza, and 2 Eurasian swine. "This virus hasn't been recognized in the USA or elsewhere," Schuchat said. CDC scientists have determined that the novel swine flu virus is resistant to the older antivirals rimantadine and amantadine but is susceptible to oseltamivir and zanamivir. Schuchat said the CDC expects to see more swine flu cases and that it would provide regular updates on its website. Most of the public health response will focus on the California and Texas areas where cases have been identified, but the CDC is urging health departments in other states to heighten their awareness of respiratory illnesses, particularly in those who have had contact with pigs or traveled to the San Diego or San Antonio areas.

Swine influenza A (H1N1) infection in 2 children (Southern California): 22 Apr 2009. On 17 Apr 2009, CDC determined that 2 cases of febrile respiratory illness occurring in children who resided in adjacent counties in southern California were caused by infection with a swine influenza A (H1N1) virus. The viruses from the 2 cases are closely related genetically, resistant to amantadine and rimantadine, and contain a unique combination of gene segments that previously has not been reported among swine or human influenza viruses in the United States or elsewhere. Neither child had contact with pigs; the source of the infection is unknown. Investigations to identify the source of infection and to determine whether additional persons have been ill from infection with similar swine influenza viruses are ongoing. This report briefly describes the 2 cases and the investigations currently under way. Although this is not a new subtype of influenza A in humans, concern exists that this new strain of swine influenza A (H1N1) is substantially different from human influenza A (H1N1) viruses, that a large proportion of the population might be susceptible to infection, and that the seasonal influenza vaccine H1N1 strain might not provide protection. The lack of known exposure to pigs in the 2 cases increases the possibility that human-to-human transmission of this new influenza virus has occurred. Clinicians should consider animal as well as seasonal influenza virus infections in their differential diagnosis of patients who have febrile respiratory illness and who 1) live in San Diego and Imperial counties or 2) traveled to these counties or were in contact with ill persons from these counties in the 7 days preceding their illness onset, or 3) had recent exposure to pigs. Clinicians who suspect swine influenza virus infections in a patient should obtain a respiratory specimen and contact their state or local health department to facilitate testing at a state public health laboratory.

Resources:

http://www.cdc.gov/swineflu/

http://www.governor.maryland.gov/flu/index.html

NATIONAL DISEASE REPORTS:

No New disease outbreaks were reported to CDC Critical Biological Agents for MWWR week 16.

INTERNATIONAL DISEASE REPORTS:

LASSA FEVER - SOUTH AFRICA EX NIGERIA: 25 Apr 2009. A Nigerian medical doctor who contracted Lassa fever in Nigeria is being treated at the Unitas Hospital in Pretoria, the Gauteng Department of Health said on Wednesday [22 Apr 2009]. "The patient is under continuous observation and is receiving treatment in the hospital's special isolation ward," said the departmental spokesperson, Vusi Sibiya. According to the department's chief of operations, Dr Abdul Rahman, the patient was flown from Abuja in Nigeria on Monday [20 APr 2009], for treatment of suspected malaria or septicaemia. "Following tests Lassa fever was diagnosed and he was immediately admitted to the isolation ward at Unitas hospital," said Dr Rahman. Lassa fever is endemic in West African countries such as Nigeria, Guinea, Liberia, and Sierra Leone but is very rarely found in South Africa. It is a viral haemorrhagic fever with symptoms that are similar to Marburg disease and malaria. Its initial symptoms include fever, nausea, headaches, sore throat, muscle pains, and a general feeling of weakness. "Severe cases may progress to show facial swelling, fluid in the lung cavity and bleeding from the mouth and nose," explained Dr Rahman. Humans can contract Lassa fever from contact with infected animals. The best known carrier of the Lassa virus is a rodent known as the multimammate rat (_Mastomys_ species) that is commonly found in West African countries. The rats shed the virus in their bodily excretions. The virus can also be spread through direct contact with the blood, urine, faeces, or other bodily secretions of a person with Lassa fever. According to the World Health Organisation (WHO) there is no epidemiological evidence supporting airborne spread between humans. Their statistics show that up to 500 000 cases of Lassa fever are diagnosed in West Africa every year and the fatality rate among hospitalised patients varies between one per cent and 15 per cent. In addition, Dr Rahman said, the pilot, 2 co-pilots and 2 paramedics who accompanied the doctor on the flight from Nigeria had been placed under quarantine as a precautionary measure. Dr Rahman explained that special isolation precautions had been taken at Unitas hospital to contain the disease and to protect health workers in the isolation wards who might be most at risk. "These include the wearing of special protective clothing such as masks, gloves and gowns and the sterilisation of equipment," he said. Dr Rahman said early diagnosis of the patient was proof of the quality laboratory services in the country which were able to make an early and correct diagnosis of the disease. "It is also testimony to the excellent relationship between the public health and private sectors, the latter being responsible for transporting the patient," he added. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (ZIMBABWE): 23 Apr 2009. An anthrax outbreak has been detected in several areas in Masvingo rural district. Farmers in areas such as Mushandike, Nemanwa, Sipambi, and Manyama confirmed they were living in perpetual fear of losing their cattle following the detection of anthrax in their areas. Member of Parliament for Masvingo West constituency, Tachiona Chiminya Mharadza, said he was running around to try and come up with a quick solution to rescue the farmers. "Farmers are afraid of losing their cattle since the detection of anthrax in their area. Most of the peasant farmers have very little cattle so they are very worried that there is a likelihood of them losing their cattle. As the MP for the area, I will engage various stakeholders so that they assist us with vaccines," said Mharadza. Titus Goronga of Manyama said he had already lost one beast due to the disease. "I have already lost one beast so far and to me that loss is very painful because as a family, we rely on cattle for sustenance. We are appealing to the government and the local authority to help us as a matter of urgency before we lose all our cattle," said Goronga. Charity Sibanda, the provincial head of veterinary services in the province, confirmed the outbreak. She was, however, not in a position to give

details concerning the most affected areas. "We are aware of the outbreak so as the department we shall do our level best fight the disease. We are yet to find out the most affected areas," said Sibanda. Farmers are saying the government is greatly to blame for the outbreak because of lack of dipping services for the past 18 months. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER WITH RENAL SYNDROME (TURKEY): 23 Apr 2009. The authorities are speculating that the death of a 29 year old man in Zonguldak is attributable to [a hantavirus infection]. Hantaviruses are carried by rodents and cause epidemic hemorrhagic fever and severe respiratory infections in humans, which can be fatal [the syndrome known as hemorrhagic fever with renal syndrome (HFRS). - Mod.CP]. If a hantavirus is confirmed as the culprit, it will raise the number of deaths from this virus infection to 2 in Bartin and Zonguldak. The victim was among 16 people admitted to hospitals complaining of high fever, chills, and nausea in Bartin and Zonguldak and among 5 of whom doctors believe had contracted a hantavirus infection. Dr Guven Celebi of the infectious diseases department at Zonguldak Karaelmas University Hospital told the press that it was too early to say for sure whether or not the man had contracted a hantavirus infection. "He was one of 5 suspected cases the hospital was monitoring. But preliminary testing had come back negative. Before he came to the hospital he had suffered a number of problems and exhibited vascular problems connected with epilepsy and his brain. Because he fit the bill [differential diagnosis] for a hantavirus infection as well, we carried out a number of tests. Some of these will produce results in 15-20 days. When those results come back, we can say some concrete things," the doctor explained. Celebi was the 1st doctor to identify a case of hantavirus infection in Turkey when a man arrived at his hospital's emergency room on 20 Feb 2009 and was admitted with symptoms of fever, chills, and nausea. He died the same day, and blood tests later confirmed he died of a hantavirus infection, while his doctors' initial diagnosis of the cause of death was 'multi-organ' failure as a consequence of acute renal insufficiency. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS, OVINE, BOVINE (RUSSIA): 23 Apr 2009. For the 1st time in 40 years, brucellosis has been revealed in cattle and in small ruminants in Chuvashia. Infected animals have been detected in the agricultural enterprises "Bakhcha," Krasnoarmeysky district and "Turunovskiy," Cheboksary district. All cattle and small ruminants in the 2 facilities, over 200, have been eliminated: 51 cattle and one horse (conditionally healthy animal, which did not show positive tests for brucellosis) have been slaughtered at the "OAO Vurnarsky meat plant", while others have been recycled in the SUE "Tsivilsky vetsanutilzavod" plant. Note that the positive reactions to brucellosis were detected in 40 sheep and 2 cows. Brucellosis in animals was recorded in March [2009], after a check-up in February by experts of the Russian Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor). It was revealed that on 25 Dec 2008, 150 [infected?] sheep for breeding were transported with an invalid veterinary certificate from the agricultural production plant "Bakhcha" to "Turunovskiy." The veterinary certificate was "backdated," avoiding the prescribed quarantine period at the location of origin, which involves diagnostic tests. In this connection, 149 sheep out of the 150 transported were put in quarantine, sampled, and positive brucellosis reactors discovered. Chuvashia had been regarded free of brucellosis for several decades and the Turunovskiy" plant did not keep sheep before; therefore, other routes of disease introduction could be regarded improbable. As to the way the disease penetrated the "Bakhcha" enterprise, [the epidemiological investigation] revealed that sheep were introduced in 2005 from 7 facilities in the Astrakhan, Yaroslavl, and Ivanovo regions with severe violations of requirements of normative legal certificates of the Russian Federation in the field of veterinary science. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (FRANCE ex SINGAPORE): 23 Apr 2009. EuroTravNet, the European Travel and Tropical Medicine Network of the International Society of Travel Medicine (ISTM), reports a case of chikungunya [virus] infection seen by our MRS site in the Laveran Military Hospital, Marseille, France. The patient was a French woman returning from a 2-day stay in Singapore (2 Mar 2009 evening to 4 Mar 2009 evening). She developed fever, polyarthritis, and rash on 6 Mar 2009. Molecular diagnosis was confirmed by the Department of Virology, Institute of Tropical Medicine for the French Army, Marseille, France. Exposures within Singapore were: Botanic gardens, Rain forest, Sentosa island, Little India and Chinatown. No excursion out of Singapore itself occurred, and she had no other international travel in the previous month. GeoSentinel, the Global surveillance program of the ISTM, notes that since autochtonous transmission was 1st reported in Singapore in 2008, only one other travel-related case of chikungunya attributed to Singapore has been reported by our sites; this occurred in a US traveler in January 2009. The SIN GeoSentinel site reports few recent chikungunya cases reported locally and so has passed the exposure history of this case to the Ministry of Health in order to pursue necessary public health measures. Singapore is a major international gateway, so control of local cases is important in order to prevent spread to the many countries, including in temperate zones, where _Aedes albopictus_ mosquitoes are active during warmer seasons. (Emerging Infectious Disease are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER WITH RENAL SYNDROME (RUSSIA): 22 Apr 2009. A marked increase in hemorrhagic fever with renal syndrome (HFRS) has been observed in the Republic of Tatarstan. Since the beginning of the year [2009], 2 people have died as a result of HFRS infection in Naberezhnye Chelny and the Almetyevsky district of the republic. The incidence of HFRS has increased 14-fold in comparison with the same period of last year [2008]. During the 1st 3 months of 2008, there were 32 HFRS cases, whereas during the same period this year [2009], a total of 436 cases of HFRS have been recorded. Humans contract infection while taking recreation in woodlands and working at small holdings. According to Rospotrebnadzor [the Federal Health and Welfare Authority], a significant increase in HFRS incidence was observed in 2008. A 3.5-fold increase was recorded, and there were 9 deaths. Specialists associate the current situation with a significant growth in the rodent vector population as a consequence of warmer summer weather and a prolonged autumn. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

HEMORRHAGIC FEVER WITH RENAL SYNDROME (TURKEY): 20 Apr 2009. With regard to the hantavirus outbreak in Turkey, _Apodemus agrarius_ is found only on the European side of the Bosporus Strait, and, therefore, Saaremaa virus, the hantavirus carried by this host species in Europe, could hardly be responsible for the outbreak reported on the northern, Black Sea coast of Turkey. There are several other _Apodemus_ mouse species in Turkey that could carry hantaviruses. Dobrava virus in _A. flavicollis_ is a well-known severe pathogen in the Balkan region, and this rodent species is common in Turkey. The severity of disease may suggest Dobrava virus or a Dobrava-like virus. Other _Apodemus_ species on the Anatolian side of Turkey include e.g. _A. mystacinus_, _A. uralensis_, _A. witherbyi_, _A. hermonensis_, _A. fulvipectus_, _A. ponticus_, and possibly _A. hyrcacinus_ and _A. arianus_, several of which can occur on the northern coast. It is good to know that the taxonomy of _Apodemus_ in the region is not completely settled, but _Apodemus_ diversity potential for new hantaviruses surely exists. In our screening in northeastern and western Turkey (referred to by moderator TY), we had samples from _A. flavicollis_, _A. uralensis_ (mentioned by us as _A. sylvatics s._l.) and _A. mystacinus_, but no hantaviruses were found. _Myodes glareolus_, the host of Puumala virus, is found on the northern Black Sea coast in Turkey, and, therefore, this virus is also a potential cause of the outbreak, but our samplings were not in the range of this vole species in Turkey. Hantaviruses in _Microtus voles_ are usually considered nonpathogenic to humans. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

http://www.cdc.gov/swineflu/

http://www.governor.maryland.gov/flu/index.html

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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